

Description of Additional Supplementary Files

File Name: Supplementary Video 1

Description: A demonstration of successful high-speed data transfer and simultaneous touch detection and location using ToSCom setup. The first part of the demonstration video uses a bench-top setup to demonstrate high-speed (3 Mbps) communication along with touch sensing through the touchscreen interface. The TI Captivate touch sensor setup requires to be connected to the computer to visualize the touch detection and location on a larger screen.

Further, to demonstrate high-speed communication on a wearable-wearable setup, the second part of the video shows data transfer from a smartphone which has a Wi-R transmitter connected to it communicating the status of the LED through the body to a wearable receiver which houses the touchscreen connected to a Wi-R receiver. Further, data transfer strictly through touch is demonstrated to show that the signal is confined within the body and shows the touch selectivity of ToSCom.